PENDING CLAIMS:

The following is the status of the claims of the above-captioned application.

1. (Previously presented.) A method for identifying the complete coding sequence of a gene of interest from a gene library, wherein the gene encodes a polypeptide carrying a signal sequence for secretion or partial secretion, the method comprising the steps of:

(a) providing a genomic DNA library or a cDNA library;

(b) inserting by in vitro transposition into a gene in said library a transposon comprising a polynucleotide encoding a promoterless and secretion signal-less secretion reporter; wherein there is a continuous open reading frame between the transposon and the polynucleotide encoding the secretion reporter;

(c) introducing the library comprising the inserted transposon into a host cell;

(d) screening for and selecting a host cell that secretes or partially secretes the [active] secretion reporter;

(e) identifying the coding sequence of the gene of interest into which the transposon was inserted in the selected host cell, by sequencing DNA flanking the inserted transposon; and

(f) identifying the complete coding sequence of the gene of interest identified in step (e) by sequencing.

2. (Previously presented.) The method of claim 1, wherein the complete coding sequence of the gene of interest in step (f) is isolated from the library of step (a).

3. (Canceled.)

4. (Previously presented.) The method of claim 1, wherein the genomic DNA library or the cDNA library is normalized.

Claims 5 – 14 (Canceled.)

15. (Previously presented.) The method of claim 1, wherein the transposon comprises an origin of replication which is functional in the host cell.

Claims 16-18 (Canceled.)

19. (Original.) The method of claim 1, wherein the secretion reporter is a protein which, when secreted from the host cell, allows said cell to grow in the presence of a substance which otherwise inhibits growth of said cell.

20. (Original.) The method of claim 19, wherein the secretion reporter is a β-lactamase or an invertase.

21. (Original.) The method of claim 1, wherein the polynucleotide of the DNA-fragment of step (b) encodes a secretion reporter carrying an N-terminal peptide linker which comprises a specific target site for proteolytic cleavage.

Claims 22-28 (Canceled.)

29. (Previously presented.) The method of claim 1, wherein the sequencing step of step (e) is performed using at least one primer directed to the transposon, or using at least one primer directed to a vector in which the DNA library or cDNA library is cloned.

30. (Previously presented.) The method of claim 1, further comprising isolating the complete coding sequence of the gene of interest by utilizing the DNA sequence information obtained in the sequencing step of step (e).

Claims 31-38 (Canceled.)

39. (Previously presented.) The method of claim 1, further comprising constructing an expression system which comprises the complete coding sequence of the gene of interest identified in step (f).

Claims 40-48 (Canceled.)